ABSTRACT

An apparatus for high-throughput combinatorial syntheses of organic molecules including a reaction vessel for containing a combinatorial-chemistry synthetic reaction, a liquid dispenser for dispensing the liquid, a liquid aspirator and an adjustment mechanism. The reaction vessel includes an ingress aperture allowing a liquid to enter into an interior of the vessel and an egress aperture for aspirating the liquid from the vessel. The liquid dispenser dispenses liquid through the ingress aperture. The liquid aspirator aspirates liquid through the egress aperture and includes a rotor for carrying the vessel and orbiting the vessel about an axis of rotation. The rotor is oriented generally in a horizontal plane and includes an adjustment mechanism for adjusting the angle of the vessel relative to the horizontal plane in response to the centrifugal force generated by orbiting the vessel about the axis of rotation. A method of combinatorial synthesis of organic molecules is also disclosed.